

Kentucky Department of Education
Science Adoption 2008-2014

Provided by the Publisher	ISBN - 0078746361		Publisher - Glencoe/McGraw-Hill		Provided by the Publisher
	Earth Science: Geology: The Environment, and the Universe				
	Type - P1	Author - Hess, et al			
	Copyright - 2008	Edition - 3rd	Readability - 1160 Lexile		
	Course - Earth Science		Grade(s) - 9,10,11,12		
	Teacher Edition ISBN if applicable			0078750458	

Overall Recommendation:

☒ **Recommended as Basal**

Overall Strengths, Weaknesses, Comments:

This is a very comprehensive text for high school Earth Science classes. There were no glaring weaknesses evident upon review. The text is well structured and easily readable.

CRITERIA

This basal resource ...

A. Encompasses KY Content Standards & Grade Level Expectations

☒ **Strong Evidence**
☐ **Moderate Evidence**
☐ **Little or No Evidence**

☐ Text is designed to be used in an elective course outside the Program of Studies

1) Includes the 7 Big Ideas of science to the following extent:

- | | | | | |
|---|--|--|--|---|
| a) Structure and Transformation of Matter | <input type="checkbox"/> Strong | <input checked="" type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input type="checkbox"/> N/A |
| b) Motion and Forces | <input type="checkbox"/> Strong | <input checked="" type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input type="checkbox"/> N/A |
| c) The Earth and the Universe | <input checked="" type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input type="checkbox"/> N/A |
| d) Unity and Diversity | <input type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input checked="" type="checkbox"/> N/A |
| e) Biological Change | <input type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input checked="" type="checkbox"/> Little | <input type="checkbox"/> N/A |
| f) Energy Transformation | <input checked="" type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input type="checkbox"/> N/A |
| g) Interdependence | <input type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input checked="" type="checkbox"/> N/A |

2) Addresses content-specific enduring understandings from the related Program of Studies standards.

☐ Strong ☐ Moderate ☐ Little ☐ N/A

3) Addresses content-specific skills and concepts from the related Program of Studies standards.

☐ Strong ☐ Moderate ☐ Little ☐ N/A

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4) **Content addressed is current, relevant and non-trivial** ☒ Strong ☐ Moderate ☐ Little ☐ N/A

5) **Provides opportunities for critical thinking/reasoning** ☒ Strong ☐ Moderate ☐ Little ☐ N/A

6) **Strengths, Weaknesses, Comments:**

- Specific strengths-which areas/concepts are covered exceptionally well?
- Specific weaknesses-which areas/concepts would likely require supplementing?

This book does discuss some biological topics in the context of the origins of life on Earth and how this allows scientists to make conclusions about the history of Earth. The main focus of the content is on the Earth sciences with supporting content from other big ideas.

B. Functionality & Suitability

☒ **Strong Evidence**
☐ **Moderate Evidence**
☐ **Little or No Evidence**

1) **Suitability** ☒ Strong ☐ Moderate ☐ Little ☐ N/A

- Should be suitable for use with a diverse population and is free of bias regarding race, age, ethnicity, gender, religion, social and/or geographic environment; is free of stereotyping or bias of any kind.

2) **Content quality** ☒ Strong ☐ Moderate ☐ Little ☐ N/A

- Free from factual errors
- Content is presented conceptually when possible—more than a mere collection of facts
- Content included accurately represents the knowledge base of the discipline
- Theories/scientific models contained represent a broad consensus of the scientific community

3) **Connections to Literacy**

Note: may apply to either student or teacher editions

☒ Strong ☐ Moderate ☐ Little

- Employs a variety of reading levels and is grade/level appropriate
- Contains pre, during, post reading activities
- Provides opportunities for summarizing, reviewing, and reinforcing vocabulary skills and concepts at multiple levels of difficulty for a variety of learning styles.
- Student text provides opportunity to integrate reading and writing
- Uses vocabulary that is age and content appropriate
- Focuses on critical vocabulary vs. extensive lists
- Identifies key vocabulary through definitions in both text and glossary
- Engaging text- does the text facilitate learning?
- Does understanding the text require having performed the imbedded activities?

4) **Connections to Technology** ☒ Strong ☐ Moderate ☐ Little

- Integrates technology and reflects the impact of technological advances
- Uses technology in the collection and/or manipulation of authentic data

5) Support for Diverse Learners

☐ Strong ☒ Moderate ☐ Little

- Provides support for ESL students
 - Provides support for differentiation of instruction in diverse classrooms
- Note: may apply only to teacher edition*

6) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

The only apparent support for ELL is a glossary with definitions in English and Spanish. There did not appear to be any type of bias in the course of reviewing the text. The content appeared to be of appropriate complexity and correctness. Embedded into the text are vocabulary lists, section objectives, intermittent comprehension checks, section reviews, and chapter questions. A diverse set of literacy strategies was not evident. Within the teacher's edition, there is mention of activities that can be accessed using the Internet.

C. Supports Inquiry and Skill Development

☒ Strong Evidence
☐ Moderate Evidence
☐ Little or No Evidence

1) Promotes Inquiry, research and Application of Learning

☒ Strong ☐ Moderate ☐ Little

- Provides opportunities for inquiry and research that includes activities such as self-selecting topics, formulating authentic questions, gathering information, researching resources, observing, interviewing, and evaluating information, analyzing and synthesizing data and communicating findings and conclusions.
- Requires students to use higher-level cognitive skills (analysis, synthesis, evaluation, etc.)
- Provides activities and projects for students to deepen their knowledge and cultivate and strengthen problem-solving and decision-making skills.
- Provides opportunities for application of learned concepts.
- Uses a variety of relevant charts, graphs, diagrams, time lines, and other illustrations to invite and motivate students to engage in discussion, problem solving, and other high-order thinking skills.
- Emphasizes conceptual understandings that invite students to predict, conclude, evaluate, develop and extend ideas to support reasoning.

Note: may apply to either teacher or student edition

2) Skill Development

☒ Strong ☐ Moderate ☐ Little

- Provides opportunities to make sense of data
- Provides opportunities for critical thinking and reasoning (analyze arguments, distinguish fact/opinion, recognize bias)
- Provides opportunities to examine a range of types of evidence
- Contains embedded activities (or extensions) that emphasize use of technology for problem solving

Note: may apply to either teacher or student edition

3) Strengths, Weaknesses, Comments:

The text shows strong evidence of opportunities for inquiry, the use of higher level cognitive skills, and application of learned content. Students must use critical thinking and reasoning. Students are asked to use evidence to analyze data. Technology is used as an extension for many prompts and activities.

D. Supports Best Practices of Teaching and Learning

- ☒ Strong Evidence
☐ Moderate Evidence
☐ Little or No Evidence

1) Engages Students

☒ Strong ☐ Moderate ☐ Little

- Includes content geared to the needs, interests, and abilities of students
 - Engages and motivates students using components such as real-life situations, simulations, experiments, and data gathering.
 - Includes information and activities that assist students in seeing relevance of concepts (where appropriate) to their own lives and experiences
 - Provides a variety of strategies, activities, and materials to enhance student learning at the appropriate learning levels
 - Activities are truly congruent to the concepts addressed, not merely correlated
- Note: may apply to either teacher or student edition*

2) Uses Assessment to Inform Instruction

☒ Strong ☐ Moderate ☐ Little

- Includes multiple means of assessment as an integral part of instruction
 - Provides evaluation measures in the teacher edition that supports differentiated learning activities
 - Embedded assessments reflect a variety of Depth of Knowledge levels
- Note: may apply to either teacher or student edition*

3) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards

There is a variety of well thought out assessments that are incorporated throughout each chapter. Assessments contain questions that have a variety of DOK levels. Differentiated learning activities are outlined in the teacher's edition. Real world media is incorporated throughout the text with connections to additional, current information regarding the subject.

E. Has an Organization/ Format that Supports Learning and Teaching

- ☒ Strong Evidence
☐ Moderate Evidence
☐ Little or No Evidence

1) Organizational Quality

☒ Strong ☐ Moderate ☐ Little

- Print and/or electronic materials present minimal barriers to learners
- Presents chapters/lessons in an organized and logical sequence

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- Provides clearly stated objectives for each lesson.
 - Uses text features (e.g., titles, headings, subheadings, review questions, goals, objectives, space, print, type size, color) to enhance readability.
 - Makes use of various forms of media (e.g., CD's, recordings, videos, cassette tapes, computer software, web-based components) as either student or teacher resources
 - Includes clear, accurate, appropriate and clearly explained illustrations and/or graphics that reinforce content standards.
 - Incorporates a glossary, footnotes, recordings, pictures, and/or tests that aid pupils and teachers in using the book effectively
 - Uses grade-appropriate type size
- Included media are durable, easy to use and have technical merit
- Construction appears to be durable and able to withstand normal use

2) Essential Components (beyond student and teacher text) ☐ Strong ☐ Moderate ☐ Little

- Items identified as essential components support the learning goals and concept coverage of the basal

3) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

The teacher and student addition are the only components that are part of the bid. For this reason, the essential components has been rated "little". The organization of the text is logical and sequenced in an acceptable manner. The format of the text is consistant from chapter to chapter.

F. Has available Ancillary/ Gratis Materials

Note: The decision whether to recommend or not recommend this resource as a basal should not be influenced by Section F

- ☐ Strong Evidence
☐ Moderate Evidence
☒ Little or No Evidence

1) Ancillary/Gratis Materials

- Coordinates teacher resources easily with student material (e.g., accompaniments included, student pages shown, instructional technology indicated).
- Are well-organized and easy to use
- Provide substantive learning opportunities and are congruent with student learning goals
- Provide opportunities for high-level thinking, assessment, and/or problem solving

2) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

These materials were not included in the bid and were not available for review.